



- Ask a qualified installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Use only those parts and accessories supplied or specified by Daikin. Ask a qualified installer or contractor to install those parts and accessories. Use of unauthorized parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Read the User's Manual carefully before using this product. The User's Manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

For any inquiries, contact your local distributor.



PCH0601

VAM-GJ SERIES

HEAT RECLAIM VENTILATION

HRV

Combined Air Conditioning and Ventilation
for Energy Efficiency and Comfort

Cautions on product corrosion

1. Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced.
2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided and choose an outdoor unit with anti-corrosion treatment.



The air conditioners manufactured by Daikin Industries have received ISO 9001 certification for quality assurance.

Certificate Number: JIM-0107
JQA-0495
JQA-1452



All Daikin Industries locations and subsidiaries in Japan have received environmental management system standard ISO 14001 certification.

Daikin Industries, Ltd.
Domestic Group
Certificate Number: EC99J2044

About ISO 14001

ISO 14001 is the standard defined by the International Organization for Standardization (ISO) relating to environmental management systems. Our group has been acknowledged by an internationally accredited compliance organization as having an appropriate programme of environmental protection procedures and activities to meet the requirements of ISO 14001.

Dealer

DAIKIN INDUSTRIES, LTD.

Head Office:
Umeda Center Bldg., 2-4-12, Nakazaki-Nishi,
Kita-ku, Osaka, 530-8323 Japan

Tokyo Office:
JR Shinagawa East Bldg., 2-19-1, Konan,
Minato-ku, Tokyo, 108-0075 Japan

<http://www.daikin.com/global/>

©All rights reserved
Printed in Japan 05/06/003 Y.J.C.

•The specifications, designs, and information in this brochure are subject to change without notice.

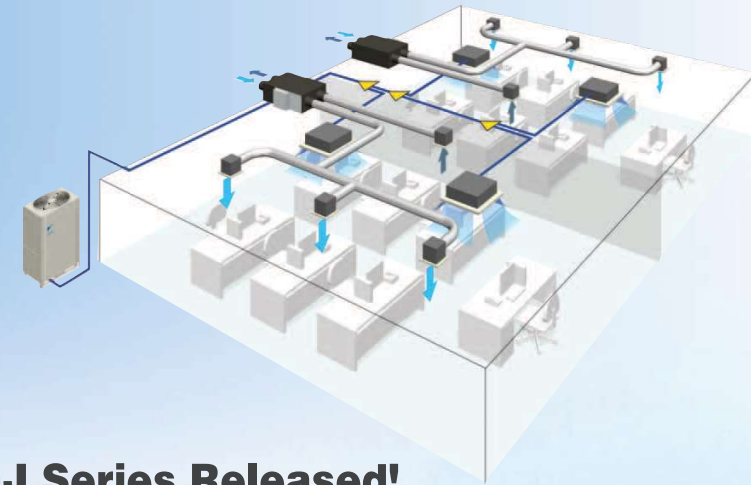
Printed on 100% recycled paper with soy ink.

Centralized Control of Air Conditioning and Ventilation by Interlocking
with Daikin's VRV system, SkyAir, and Other Air Conditioning Systems

The HRV Creates a High-Quality Environment by Interlocking with the Air Conditioner

Daikin's HRV (Heat Reclaim Ventilation) recovers heat energy lost through ventilation and holds down room temperature changes caused by ventilation, thereby maintaining a comfortable and clean environment. This also curbs the load on the air conditioning system and conserves energy.

In addition, the HRV is interlocked to Daikin's VRV system, SkyAir and other air conditioning systems and automatically switches over ventilation mode, further increasing the effects of energy conservation. HRV operation has been centralized on the air conditioner remote controller allowing total control over air conditioning and ventilation with a simple configuration.



VAM-GJ Series Released! 9 Models to Choose From!

- Improved Enthalpy Efficiency*¹**
- Higher External Static Pressure*²**
- Enhanced Energy Saving Functions**

★1 For models: VAM150/250/350/650/800/1000/2000GJVE
★2 For models: VAM150/350/500GJVE

Daikin air conditioner
Indoor unit



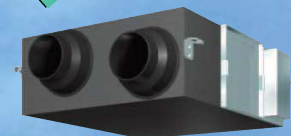
- ON/OFF signal
- Cooling/Heating mode signal
- Set temperature signal
- Ventilation signal
- Humidifier ON/OFF signal

Interlocking

- Operating mode signal
- Filter cleaning signal
- Failure detection signal



LCD remote controller
for indoor unit



HRV

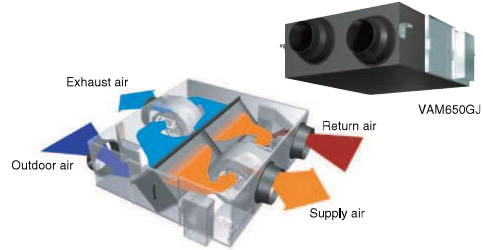
Model Lineup

Model Series	Air flow rate (m ³ /h)								
	150	250	350	500	650	800	1000	1500	2000
VAM-GJ	●	●	●	●	●	●	●	●	●

Features of Daikin HRV

VAM-GJ Series

This series provides higher enthalpy efficiency,*¹ due to the greatly enhanced performance of the new ultra-thin film element. Furthermore, improved external static pressure*² offers more flexibility for installation. Along with these three improvements, Daikin's exclusive function—nighttime free cooling operation—contributes to energy conservation and more comfortable space.



*1 For models: VAM150/250/350/650/800/1000/2000GJVE
*2 For models: VAM150/350/500GJVE

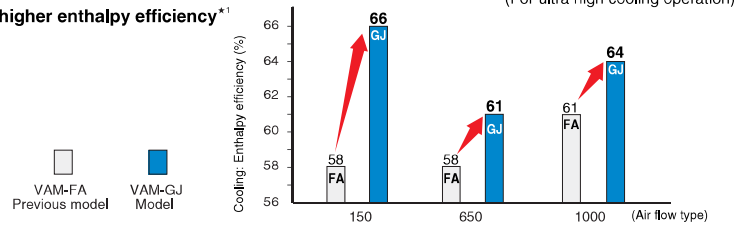
Enthalpy efficiency drastically improved!

Introduction of ultra-thin film element significantly increases enthalpy efficiency!

Enthalpy efficiency improved*

Adoption of the ultra-thin film element leads to highly improved enthalpy efficiency.*¹

Achieving higher enthalpy efficiency*¹



*1 For models: VAM150/250/350/650/800/1000/2000GJVE

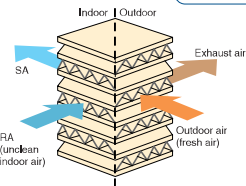
Ultra-thin film element

The partition sheet in the heat exchanger element has been significantly upgraded. It is approximately two-third thinner than the conventional type, resulting in a great improvement in moisture absorption!

Previous element (FA model)

Moisture absorption is less effective due to the thickness of the partition sheets. It also limits the effective area that supply and exhaust air can be exposed to.

Thickness of the partition sheet
60 μm



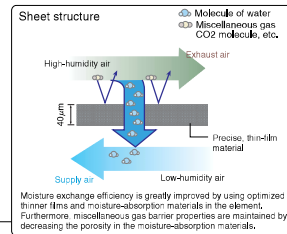
Ultra-thin film element

Due to the thinner film...

- Decreases the moisture resistance of the partition sheets drastically.
- Realizes more space for extra layers in the element, resulting in increased effective area that supply and exhaust air can be exposed to.

Moisture absorption increased by approx. 10%!

Thickness of the partition sheet
40 μm



Higher external static pressure*²

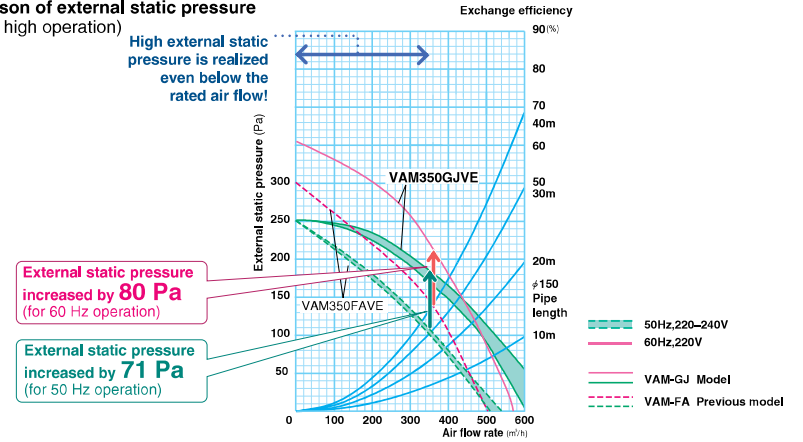
External static pressure has been significantly increased by adopting a new type of fan.*²

High external static pressure design adopting efficient fan performance

Improved!

Improvements to the fan, including the use of multi-arc blades and optimized fan sizes, help boost efficiency.

Comparison of external static pressure (For ultra high operation)



*2 For models: VAM150/350/500GJVE

Energy conservation and comfortable air space

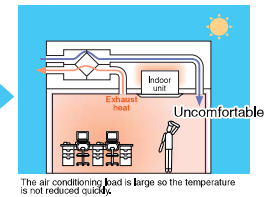
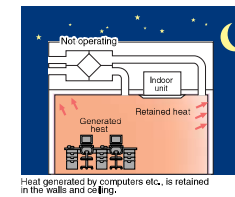
Nighttime free cooling operation

Air conditioning sensible heat load reduced by approx. 5%!

Nighttime free cooling operation is an energy-conserving function that works at night when air conditioners are off. By ventilating rooms containing office equipment that raises the room temperature, nighttime free cooling operation reduces the cooling load when air conditioners are turned on in the morning. It also alleviates feelings of discomfort in the morning caused by heat accumulated during the night.

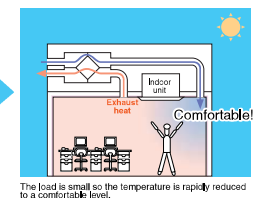
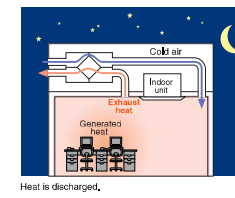
- Nighttime free cooling operation only works to cool and if connected to Building Multi or VRV systems.
- Nighttime free cooling operation is set to "off" in the factory settings, so if you wish to use it, request your dealer to turn it on.

No operation



Nighttime free cooling operation

The indoor accumulated heat is discharged at night. This reduces the air conditioning load the next day thereby increasing efficiency.



*Interlocked operation with an air conditioner

Air Conditioning Load Reduced by Approximately 30%

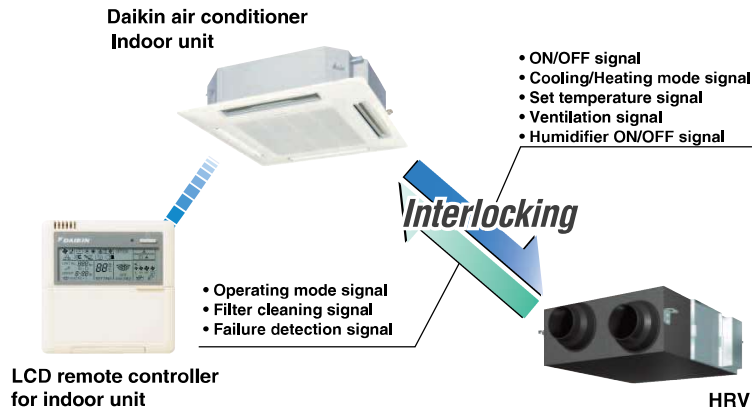
1. Approximately 20% by operating in total heat exchange mode (in comparison with normal ventilation fans)
2. Another approximately 8% gained by auto-ventilation mode changeover switching
3. Yet another approximately 2% by pre-cool, pre-heat control

• The above values may vary according to weather and other environmental conditions at the location of the machine's installation.
 • The above values are based on the following conditions:
 Application: Tokyo office building
 Building form: 2 floors above ground, 6 floors underground, floor area 2,100 m²
 Personnel density: 0.25 person/m²
 Ventilation volume: 25 m³/h
 Indoor air conditioning level: summer 25°C 50% RH, intermediate seasons 24°C 50% RH, winter 22°C 40% RH
 Operating time: 2745 hours (9 hours per day, approx. 25 days per month)
 Calculation method: simulation based on "MICRO-HASP/1982" of the Japan Building Mechanical and Electrical Engineers Association.

Interlocking

Annual air conditioning load reduced by **approx. 30%!**

The HRV is interlocked to Daikin's VRV system, SkyAir and other air conditioning systems and automatically switches over ventilation mode, further increasing the effects of energy conservation. HRV operation has been centralized on the air conditioner remote controller allowing total control over air conditioning and ventilation with a simple configuration.

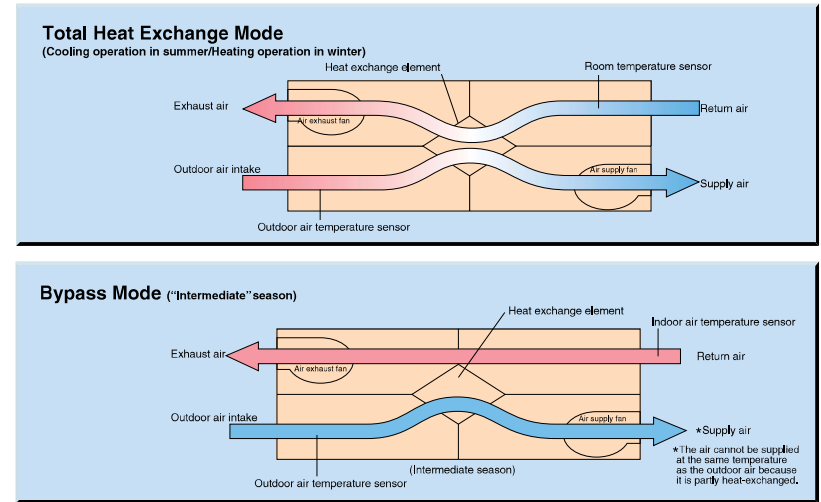


Pre-cool, Pre-heat Control

Reduces air conditioning load by not running the HRV while air is still clean soon after the air conditioner is turned ON.

Auto-ventilation Mode Changeover Switching

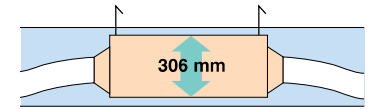
Automatically switches the ventilation mode (Total Heat Exchange Mode/Bypass Mode) according to the operating status of the air conditioner.



Compact equipment

With a height of just 306 mm, the unit easily fits in limited spaces, such as above ceilings.

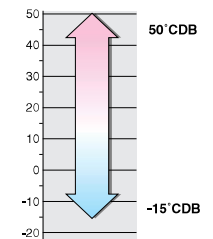
* In case of VAM500GJVE



Cold climate compatible :

Standard operation at temperatures down to -15°C

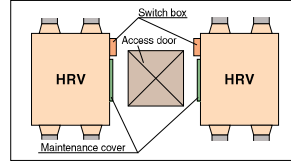
The intermittent operation mode is activated when outdoor temperature goes down to -10°C or below, preventing freezing or condensation in the unit. Standard models can now be used in cold climate regions.



Simple Design and Construction

- With only one 450-mm square inspection aperture, maintenance and heat exchange element replacement can be performed with ease.

- The unit can be installed upside down in accordance with the conditions of the location.



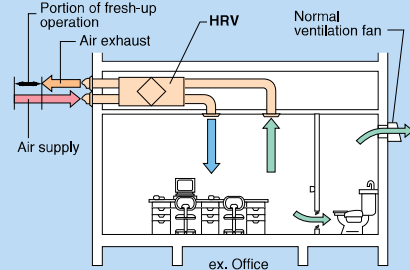
Clean

Fresh-up Operation

The user can select between two fresh-up modes using the remote controller.

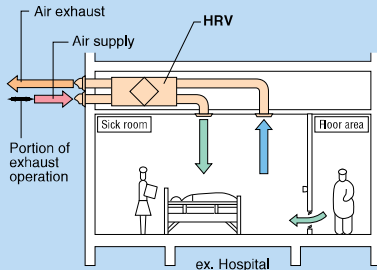
Supply rich mode:

Raising the air supply maintains proper room pressure to prevent back-flow of toilet/kitchen odors or moisture inflow.

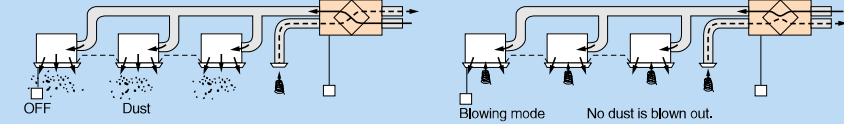


Exhaust rich mode:

Raising exhaust air decreases room pressure to prevent the leaking of odors or floating bacteria into other rooms.



Preventing Dust from Falling with Directly Mounted Ducts



With Competitors' Products

When conventional total heat exchange units, which are independently operated using a dedicated remote controller, are directly connected by a duct, there is a possibility of dust falling from the air filter of the indoor unit when the air conditioner is OFF.

With the HRV

When the HRV is operating independently, the fan in a interlocked indoor unit continues turning, so dust does not fall from the air filter.

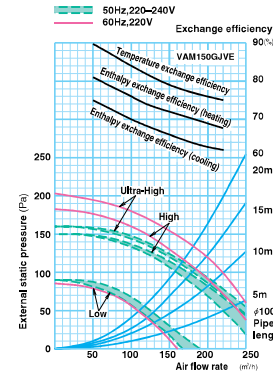
- A sign is displayed on the remote controller when the air filter needs cleaning.

Model Line Up

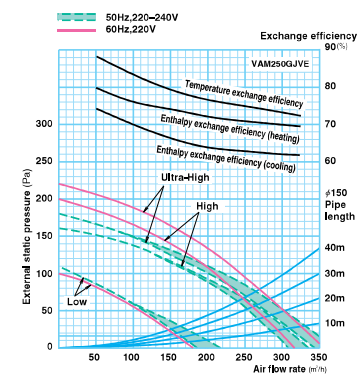
VAM-GJVE Series



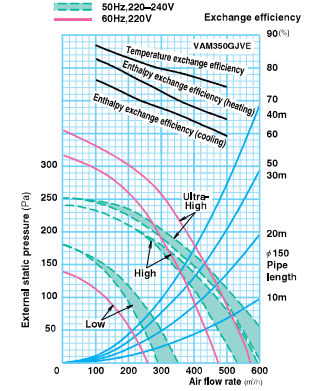
VAM150GJVE



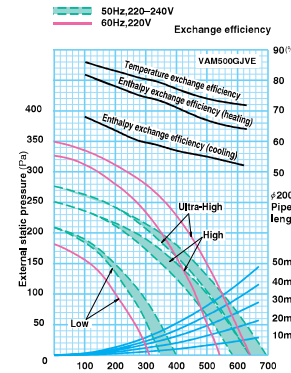
VAM250GJVE



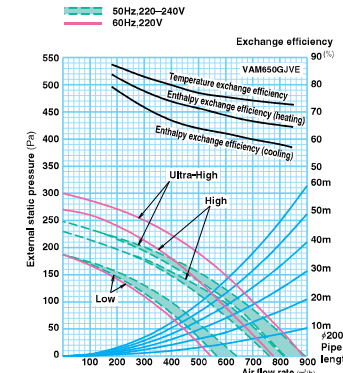
VAM350GJVE



VAM500GJVE



VAM650GJVE



VAM800GJVE

